IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re patent application of:	) Attorney Docket No.: S-215
	) Customer No.: 00919
Jean-Marc Alexia, et al.	)
	) Examiner: JOSEPH, Tonya S.
Serial No.: 10/809,570	) Group Art Unit: 3628
Filed: March 24, 2004	)
Confirmation # 7997	) Date: November 16, 2009

Title: SECURE FRANKING MACHINE

Mail Stop Appeal Brief- Patents
Commissioner for Patents
Alexandria, VA 22313-1450

APPELLANTS' BRIEF ON APPEAL

Sir:

This is an appeal pursuant to 35 U.S.C. § 134 and 37 C.F.R. §§ 41.31 et seq. from the final rejection of claims 19-44 of the above-identified application mailed April 16, 2009. This Brief is in furtherance of the Notice of Appeal filed in this case on July 16, 2009. A Petition for a two-month extension of time to respond and associated fee is submitted herewith. Accordingly, this brief is timely filed. The fee for submitting this Brief is $540.00 (37 C.F.R. § 1.17(c)). Please charge Deposit Account No. **16-1885** in the amount of $540.00 to cover these fees. The Commissioner is hereby authorized to charge any additional fees that may be required for this appeal or to make this brief timely or credit any overpayment to Deposit Account No. **16-1885**.

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I. Real Party in Interest

The real party in interest in this appeal is SECAP (Groupe Pitney Bowes), S.A.S., a company organized under the laws of FRANCE, a wholly owned subsidiary of Pitney Bowes Inc., a Delaware corporation, and the assignee of this application.

II. Related Appeals and Interferences

There are no appeals or interferences known to Appellants, their legal representative, or the assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. Status of Claims

Claims 19-44 are in the case and under final rejection of the Examiner.

Claim 1-18 have been canceled without prejudice or disclaimer.

Claims 19-22, 24, 26-31 and 44 are in the case and under final rejection of the Examiner and stand rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094") and U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755").

Claim 23 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); alleged Official Notice as allegedly supported by Kanaya and U.S. Patent Application Publication No. 2003/0006878 A1 by Chung ("Chung '878").

Claim 25 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent

No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); and alleged Official Notice that is allegedly supported by alleged Applicants' Admitted Prior Art.

Claims 32-41 are in the case and under final rejection of the Examiner and stand rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488").

Claim 42 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488") and alleged Official Notice as allegedly supported by Francisco.

Claim 43 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488") and alleged Official Notice that is allegedly supported by alleged Applicants' Admitted Prior Art.

Appellants hereby appeal the rejection of claims 19-44.

IV. Status of Amendments

There are no amendments to the claims filed subsequently to the Final Office Action of April 16, 2009. Therefore, the claims set forth in Appendix A to this brief are those as set forth before the final rejection.

V. Summary of Claimed Subject Matter

Appellants' invention as presently claimed relates to systems and methods for secure postal franking including a unit for printing franking data received from a data generating unit, the printer unit including at least one member for printing data, wherein the franking machine includes additional means for wireless communication between the print member and the data generating unit to enable identification of the print member by the data generating unit. Accordingly, by using additional wireless communication means, the data generating unit is able to control the print member and in particular to verify its identity. The problem includes at least securing "sensitive" data consisting of franking data or marks. See Specification at Abstract, ¶¶ 0001-0002, 0018-0019.

FIG. 1, shown below depicts a franking machine 10. Machine 10 generally includes two entities: a unit 12 for generating franking data and a unit 14 for printing data that receives franking data from the unit 12 in order to print it, for example in the form of a franking mark 16 on an envelope 17. Unit 12 has the following functions: composing the franking mark; sending data to be printed to the printer unit 14 (scheduling printing of the franking mark); managing accounting data, in the sense of managing the totalizing counter of franking amounts and imprint counters; checking the consistency of the accounting data, which ensures the reliability of the data record for each franking cycle; and guaranteeing the integrity, confidentiality and availability of the accounting data.

Unit 12, also known as a meter, includes a central data processing unit 18 that communicates with a module 20 including a cryptographic circuit 22 containing the algorithm or algorithms necessary for encrypting data, and a fraud detector circuit 24.

The unit 12 for generating franking data communicates with the printer unit 14 via a USB connection 38, for example. The printer unit 14, which is a printer, for example, includes a printing control module 40 which receives from the unit 12 a stream of franking data to be printed and an encrypted signature 42 and converts the data received into a stream of printing commands 44 that is then sent to one or more print members 46 for printing franking data in the form of the franking mark 16. The print member 46 is a printer cartridge that includes an ink reservoir 48 and a print head 50 for printing data (FIGS. 1 and 4a). The commands for printing the stream 44 control the print head 50 for printing the franking mark 16 on the support 17. The print member 46 is rendered intelligent by the presence of a module 54 affixed to it. The franking machine 10 further includes additional wireless communication means between the print member 46 and the unit 12, enabling the latter to identify said print member. The unit 12 includes a sender module 56 and the printer unit 14 includes a receiver module 58 affixed to the print member 46. In this embodiment, wireless communication between the unit 12 and the print member 46 is performed via radio waves. Module 58 is a tag identifying the print member which communicates its identification data by radio when acted on by an electromagnetic field whose source is in the module 56. When the module 56 wishes to identify a print member in order to check that it is an authorized print member, it then generates a constant magnetic field directed to the module 58 of the print member 46 and, by means of a receiver circuit, measures variations in the magnetic field generated by the module 58. The module 58 amplitude-modulates the electromagnetic signal, so to speak. Thus measuring the variations of the electromagnetic field provides data identifying the print member and therefore enables the nearby print member to be recognized or not. This recognition procedure is carried out before the unit 12 for generating data sends franking data to the printer unit 14 for printing. Note that the frequency of the electromagnetic waves emitted by the module 56 is 13.56 MHz, for example. FiGs. 4A-4H depict an illustrative print head module with several of the described components attached thereto. See Specification at ¶¶ 0086-0125, FIG. 1.

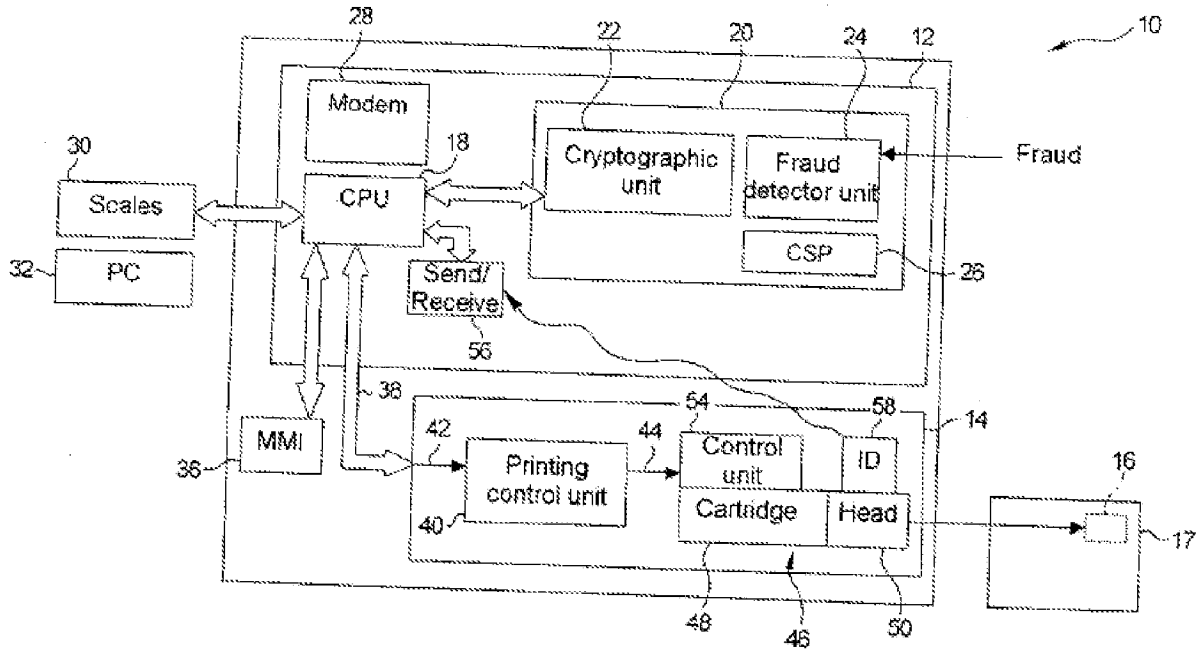

FIG. 6 below shows in more detail some of the components constituting the FIG. 5 data processing unit 68. The data processing unit 68 includes a serial receiver unit 108 notably including a buffer memory for the intermediate storage of data extracted from the stream 44 of printing control signals. As shown, some of the printing control signals are used by unit 92 for self-powering the data processing unit 68. A unit 110 for analyzing data extracted from the printing control signals and combining various functions executed by the units 98, 100, 102 and 104 in FIG. 5 supplies a signal Cmd-decode. A circuit 112 including a logic switch selectively authorizes the passage of a signal Xout, on the basis of a printing control signal Xin, as a function of the value of the control signal Cmd-decode. The Cmd-decode signal is produced for one or more lines of franking data and, for example, authorizes the passing and therefore the printing of a given number of lines of franking data that constitute the franking mark. Note that the circuit 112 constitutes a pattern that is repeated several times according to the number of signals Xin obtained from the printing control signals. The stream 114 of printing commands from the unit 68 is then transmitted to the print head 50 to control the print nozzles. See Specification at ¶¶ 0206-0213, FIG. 6.

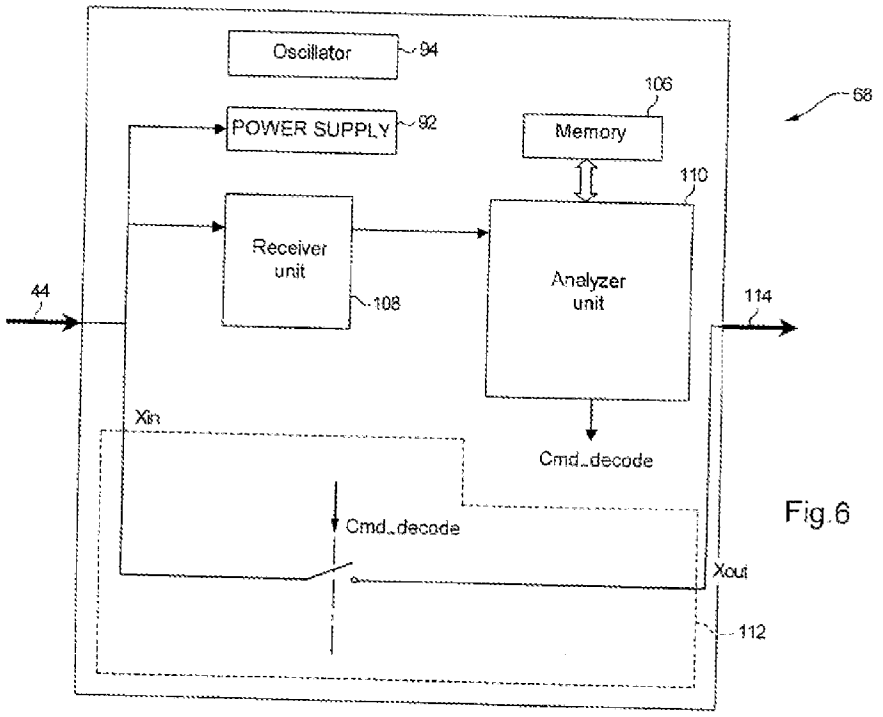

Fig.6

Independent claim 19 is shown with illustrative annotated references to the specification, reference numerals and figures:

19. A franking machine comprising (FIGs. 1-8; ¶¶0086-0221):

a unit for generating franking data (12) and a unit for printing data (14) connected to said data generating unit and adapted to receive franking data therefrom,

said printing unit (14) including at least one member for printing data and means for receiving printer control signals,

wherein the franking machine includes:

means (10) for obtaining data enabling unique identification and authentication of the print member by the data generating unit in a first communication mode,

means for generating a signature (12) of the franking data by the data generating unit,

means for encrypting the signature (22) of the franking data by the data generating unit using an encryption key determined using the obtained data that enabled identification and authentication of the print member,

means for sending (38) the franking data and the encrypted signature to the printing unit in a second communication mode and for including a control signal with printing control signals, and

means (14) for decrypting the encrypted signature by the print member.

Dependent claims 20-21 and 23 are shown with illustrative annotated references to the specification, reference numerals and figures:

20. The franking machine according to claim 19, wherein the print member includes means (14) for authenticating franking data

21. A franking machine according to claim 19, wherein the print member includes means (14) for verifying the integrity of the franking data.

23. A franking machine according to claim 22, wherein the identification tag includes a substrate fixed permanently to the exterior of the print member and communication means (58) on the substrate.

Independent claim 31 is shown with illustrative annotated references to the specification, reference numerals and figures:

31. A method of securing data in a franking machine that includes a unit for generating franking data and a unit for printing data connected to said data generating unit and adapted to receive franking data therefrom, said printing unit including at least one member for printing data and means for receiving printer control signals, comprising (FIGs. 1-8; ¶¶0086-0221)::

obtaining data (58) uniquely identifying and authenticating the print member (14) in a first communication mode by the data generating unit,

generating a signature of the franking data by the data generating unit (12),

encrypting the signature of the franking data by the data generating unit (12) using an encryption key determined using the obtained data (58) uniquely identifying and authenticating the print member,

sending the franking data and the encrypted signature to the printing unit in a second communication mode (38) and sending a control signal using the printing control signals (112), and

decrypting the encrypted signature by the print member (14).

Additional features of the invention are discussed below in the Argument section of this Brief. This summary is not intended to supplant the description of the claimed subject matter as provided in the claims as recited in Appendix A, as understood in light of the entire specification.

VI. Grounds of Rejection to Be Reviewed on Appeal

A. Whether Claims 19-22, 24, 26-31 and 44 are unpatentable under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094") and U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755").

B. Whether Claim 23 is unpatentable under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); alleged Official Notice as allegedly supported by Kanaya and U.S. Patent Application Publication No. 2003/0006878 A1 by Chung ("Chung '878").

C. Whether Claim 25 is unpatentable under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); and alleged Official Notice that is allegedly supported by alleged Applicants' Admitted Prior Art.

D. Whether Claims 32-41 are unpatentable under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application

Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488").

E. Whether Claim 42 is unpatentable under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488") and alleged Official Notice as allegedly supported by Francisco.

F. Whether Claim 43 is unpatentable under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488") and alleged Official Notice that is allegedly supported by alleged Applicants' Admitted Prior Art.

VII. Argument

As Appellants discuss in detail below, it is respectfully submitted that the final rejection of claims 19-44 does not meet the threshold burden of presenting a prima facie case of unpatentability. Accordingly, Appellants are entitled to grant of a patent. In re Oetiker, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

A. Claims 19-22, 24, 26-31 and 44 are not Unpatentable under 35 U.S.C. § 103(a)

Claims 19-22, 24, 26-31 and 44 are in the case and under final rejection of the Examiner and stand rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by

United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094") and U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755").

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated below.

In rejecting a claim under 35 U.S.C. §103, the Examiner is charged with the initial burden for providing a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 375 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. *In re Ochiai*, 37 USPQ2d 1127 (Fed. Cir. 1995); *In re Deuel*, 51 F.3d 1552, 34 USPQ 1210 (Fed. Cir. 1995); *In re Fritch*, 972 F.2d 1260, 23 USPQ 1780 (Fed. Cir. 1992); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ___ , 127 S.Ct. 1727, 1735 (2007) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* (quoting Kahn, 441 F.3d at 988)). *See also*, *Takeda Chem. Indus., Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1357 (Fed. Cir. 2007) (To avoid improper use of hindsight, the Examiner must articulate "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obviousness determination. (quoting *KSR*, 127 S. Ct. at 1731)).

See also, In re Kahn, 441 F.3d 977 (Fed. Cir. 2006) (Most inventions arise from a combination of old elements and each element may often be found in the prior art. However, mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole). Additionally, if the references

when combined suggest an inoperative device, the Examiner may not use the references to establish a prima facie rejection. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339 (Fed. Cir. 2001)(if references taken in combination would produce a "seemingly inoperative device," then such references teach away from the combination and cannot serve as predicates for a prima facie case of obviousness). If the cited references expressly teach away from the combination urged by the examiner, such combination would be improper. *See e.g.*, MPEP 2145 X.D, *citing In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983).

Initially, Appellants respectfully submit that the Pauschinger '255 and Strand '094 references are not properly combined and the rejection is therefore improper. One of skill in the art would not look to Strand '094 to modify Paushinger '255. For example, the Strand '094 reference is not analogous art and therefore would not be combined as suggested by the Examiner. Here, Strand '094 describes liquid chromotatography systems and one of skill in the franking machine printing arts would not look to it in order to modify the postage printing system of Paushinger '255. Here, the secondary reference Strand '094 is well outside the field of the primary reference inventors' field of endeavor of postage printing systems and even printing systems generally and therefore would not necessarily logically commend itself to such inventor's attention in considering the problem. *See e.g., In re Icon Health and Fitness, Inc.,* 496 F.3d 1374 (Fed. Cir. 2007).

Additionally, Paushinger '255 is specifically concerned with restricting printer use to authorized print consumable cartridges, whereas Strand deals with fluid testing such that the proposed combination would appear inoperable.

Independent Claim 19 recites:

> 19. A franking machine comprising:
> a unit for generating franking data and a unit for printing data connected to said data generating unit and adapted to receive franking data therefrom,
> said printing unit including at least one member for printing data and means for receiving printer control signals,
> wherein the franking machine includes:

means for obtaining data enabling unique identification and authentication of the print member by the data generating unit in a first communication mode,

means for generating a signature of the franking data by the data generating unit,

means for encrypting the signature of the franking data by the data generating unit using an encryption key determined using the obtained data that enabled identification and authentication of the print member,

means for sending the franking data and the encrypted signature to the printing unit in a second communication mode and for including a control signal with printing control signals, and

means for decrypting the encrypted signature by the print member.

(emphasis added).

Appellants respectfully submit with regard to previously amended claims 19 and 31 that none of the references as cited, either alone or in proper combination apparently teach or fairly suggest at least the elements highlighted above. For example, with regard to the following limitations, the Examiner refers to both Pauschinger references without distinguishing them on page 7 of the Final Office Action, but apparently admits that at least one does not teach or fairly suggest the following elements:

using an encryption key determined using the obtained data that enabled identification and authentication of the print member,

means for sending the franking data and the encrypted signature to the printing unit in a second communication mode and for including a control signal with printing control signals.

Neither cited Pauschinger reference at Col. 7, lines 54-59 apparently teaches or fairly suggest at least the above highlighted limitations including at least a second communications mode.

Additionally, contrary to the Examiner's assertion, Hetzer '755 does not teach or suggest including control signals, but only print data signals. The Examiner cites to Paragraph 34 of Hetzer '755, but the description found there apparently only describes print data signals.

Moreover, Paushinger '255 apparently does not teach or fairly suggest two communication modes and thus one of skill in the art would not look to Strand to suggest securing communication to the cartridge. In the Final Office Action at the top of

page 3, the Examiner suggests that Pauschinger teaches two communication modes at Col. 7, ll. 54-59, but it does not appear that multiple communications modes are suggested at all.

With regard to claims 22 and 44, Appellants respectfully submit that the positively recited elements referenced must be afforded patentable weight and is not taught or fairly suggested in the prior art.

Claim 22 recites:

> 22. A franking machine according to claim 19, wherein the print member includes at least one tag identifying said print member which communicates data identifying said member to the data generating unit by radio waves when an electromagnetic field is applied to it.

Claim 44 recites:

> 44. A franking machine according to claim 19, wherein the print member includes at least one tag identifying said print member and wherein the tag is permanently attached to the print member such that attempting to remove the tag will render it inoperative.

Contrary to the Examiner's assertion, the claim elements provide structure. Moreover, even if the cited language used functional language to describe the structure claimed, functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971); MPEP 2173.05(g).

With regard to claims 28 and 29, Appellants respectfully submit that the positively recited allegedly non-functional and descriptive element referenced must be afforded patentable weight and is not taught or fairly suggested in the prior art. *Id.*

Claims 28-29 recite:

> 28. A franking machine according to claim 19, wherein the decrypting means are fixed to a thin and flexible printed circuit that is fixed to the print member, wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer cartridge without compromising installation of the cartridge in a standard inkjet printer associated with the cartridge.
>
> 29. A franking machine according to claim 27, wherein the data processing unit is fixed to a thin and flexible printed circuit that is fixed to the print member, wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer

cartridge without compromising installation of the cartridge in a standard inkjet printer associated with the cartridge.

The Examiner apparently admits that the references do not teach or suggest the claimed elements on page 3 of the Final Office Action.

Dependent claims 20-22, 24, 26-30 and 44 are also patentable over the cited references for at least the reasons described above with reference to the associated independent claim and any intervening claims.

The remaining dependent claims are patentable over the cited references for at least the reasons stated regarding the independent claim and any intervening claims.

Accordingly, Appellants respectfully submit that the Examiner has failed to establish a prima facie case for the obviousness rejection. Appellants respectfully submit that claims 19-22, 24, 26-31 and 44 are patentable over the cited references and that the final rejection is in error and should be reversed.

B. Claim 23 is not Unpatentable under 35 U.S.C. § 103(a)

Claim 23 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); alleged Official Notice as allegedly supported by Kanaya and U.S. Patent Application Publication No. 2003/0006878 A1 by Chung ("Chung '878").

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated above with reference to the independent and any intervening claims.

Appellants respectfully traverse the rejection that is apparently based upon the combination of six references. Appellants respectfully submit that the cited references do not teach or fairly suggest at least "wherein the identification tag includes a substrate fixed permanently to the exterior of the print member and communication means on the substrate" even if properly combined. Furthermore, the Examiner is impermissibly using hindsight and the Appellants disclosure to piece together six non-analogous references without providing a basis for doing so.

Appellants respectfully submit that the Kanaya reference apparently describes only molded patterns and apparently not substrates permanently fixed to the exterior of the print member.

Appellants respectfully submit that the Examiner has failed to establish a prima facie case for an obviousness rejection. Appellants respectfully submit that claim 23 is patentable over the cited references as applied and that the final rejection should be reversed.

C. Claim 25 is not Unpatentable under 35 U.S.C. § 103(a)

Claim 25 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); and alleged Official Notice that is allegedly supported by alleged Applicants' Admitted Prior Art.

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated above with reference to the independent and any intervening claims. Claim 25 recites "wherein the data-generating unit includes an RF transceiver for communicating in the first communications mode." Appellants respectfully submit that the references as cited apparently do not teach or suggest the tag attached to the

exterior of the cartridge. While Appellants do not dispute the limited Official Notice that "data-generating units including RF transceivers are known," any extension of such notice and the combination suggested is disputed. As described above, the references as cited apparently do not teach or suggest multiple communications modes as claimed.

Accordingly, Appellants respectfully submit that the Examiner has failed to establish a prima facie case for an obviousness rejection. Appellants respectfully submit that claim 25 is patentable over the cited references as applied and that the final rejection should be reversed.

D. Claims 32-41 are not Unpatentable under 35 U.S.C. § 103(a)

Claims 32-41 are in the case and under final rejection of the Examiner and stand rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); U.S. Patent Application Publication No. 2002/0140755 A1 by Hetzer, et al. ("Hetzer '755"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488").

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated above with reference to the independent and any intervening claims.

Appellants respectfully note that Beerling '488 specifically requires an essentially rigid substrate (See Col. 3, line 8) and thus is not properly combined. The Examiner apparently admits on page 5 of the Final Office Action that Beerling '488 requires a rigid substrate, but states that such teaching does not disparage the combination. However, it is clear that such combination would be inoperative and not merely "more than one alternative." *McGinley v. Franklin Sports, Inc.,* 262 F.3d 1339 (Fed. Cir. 2001)(if references taken in combination would produce a "seemingly inoperative device," then such references teach away from the combination and cannot serve as predicates for a

prima facie case of obviousness). Here, the reference as cited apparently does not teach multiple alternatives, but only one that is unworkable as combined.

Accordingly, Appellants respectfully submit that the Examiner has failed to establish a prima facie case for an obviousness rejection. Appellants respectfully submit that claims 32-41 are patentable over the cited references as applied and that the final rejection should be reversed.

E. Claims 42 is not Unpatentable under 35 U.S.C. § 103(a)

Claim 42 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488") and alleged Official Notice as allegedly supported by Francisco.

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated above with reference to the independent and any intervening claims. Moreover, Appellants respectfully note that Beerling '488 is not properly combined as described more fully in argument section D.

Appellants repeatedly disputed several statements of Official Notice in the rejection and requested a reference. In relying on Official Notice, the MPEP instructs that only "notorious" facts used to "fill the gaps" in dependent claims is appropriate and its use should be rare at final rejection or later. See MPEP 2144.03.

Accordingly, Appellants respectfully submit that the Examiner has failed to establish a prima facie case for an obviousness rejection. Appellants respectfully submit that claim 42 is patentable over the cited references as applied and that the final rejection should be reversed.

F. Claims 43 is not Unpatentable under 35 U.S.C. § 103(a)

Claim 43 is in the case and under final rejection of the Examiner and stands rejected under 35 U.S.C. 103(a) as allegedly rendered obvious by United States Patent No. US 6,978,255 B1 to Pauschinger, et al. ("Pauschinger '255") in view of United States Patent No. US 6,041,704 to Pauschinger ("Pauschinger '704") in further view of U.S. Patent Application Publication No. 2002/0199094 A1 by Strand ("Strand '094"); and U.S. Patent No. 6,325,488 B1 to Beerling, et al. ("Beerling '488") and alleged Official Notice that is allegedly supported by alleged Applicants' Admitted Prior Art.

Appellants respectfully disagree with the rejection and urge its reversal for at least the reasons stated above with reference to the independent and any intervening claims. Moreover, Appellants respectfully note that Beerling '488 is not properly combined as described more fully in argument section D.

Appellants repeatedly disputed several statements of Official Notice in the rejection and requested a reference. In relying on Official Notice, the MPEP instructs that only "notorious" facts used to "fill the gaps" in dependent claims is appropriate and its use should be rare at final rejection or later. See MPEP 2144.03.

Accordingly, Appellants respectfully submit that the Examiner has failed to establish a prima facie case for an obviousness rejection. Appellants respectfully submit that claim 43 is patentable over the cited references as applied and that the final rejection should be reversed.

For at least the above stated reasons, Appellants respectfully submit that the final rejection as to claims 19-44 is in error and should be reversed.

IX. Conclusion

In Conclusion, Appellants respectfully submit that the final rejection of claims 19-44 is in error for at least the reasons given above and should, therefore, be reversed.

Respectfully submitted,

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VIII – CLAIMS APPENDIX
APPENDIX A

19. A franking machine comprising:

a unit for generating franking data and a unit for printing data connected to said data generating unit and adapted to receive franking data therefrom,

said printing unit including at least one member for printing data and means for receiving printer control signals,

wherein the franking machine includes:

means for obtaining data enabling unique identification and authentication of the print member by the data generating unit in a first communication mode,

means for generating a signature of the franking data by the data generating unit,

means for encrypting the signature of the franking data by the data generating unit using an encryption key determined using the obtained data that enabled identification and authentication of the print member,

means for sending the franking data and the encrypted signature to the printing unit in a second communication mode and for including a control signal with printing control signals, and

means for decrypting the encrypted signature by the print member.

20. The franking machine according to claim 19, wherein the print member includes means for authenticating franking data

21. A franking machine according to claim 19, wherein the print member includes means for verifying the integrity of the franking data.

22. A franking machine according to claim 19, wherein the print member includes at least one tag identifying said print member which communicates data identifying said member to the data generating unit by radio waves when an electromagnetic field is applied to it.

23. A franking machine according to claim 22, wherein the identification tag includes a substrate fixed permanently to the exterior of the print member and communication means on the substrate.

24. A franking machine according to claim 19, wherein the data-generating unit includes a circuit for receiving identification data.

25. A franking machine according to claim 22, wherein the data-generating unit includes an RF transceiver for communicating in the first communications mode.

26. A franking machine according to claim 19, wherein the decrypting means of the print member obtains data identifying said print member.

27. A franking machine according to claim 19, wherein the print member includes a data processing unit that includes the decrypting means.

28. A franking machine according to claim 19, wherein the decrypting means are fixed to a thin and flexible printed circuit that is fixed to the print member, wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer cartridge without compromising installation of the cartridge in a standard inkjet printer associated with the cartridge.

29. A franking machine according to claim 27, wherein the data processing unit is fixed to a thin and flexible printed circuit that is fixed to the print member, wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer cartridge without compromising installation of the cartridge in a standard inkjet printer associated with the cartridge.

30. A franking machine according to claim 19, wherein the print member is an inkjet printer cartridge including at least one print head.

31. A method of securing data in a franking machine that includes a unit for generating franking data and a unit for printing data connected to said data generating unit and adapted to receive franking data therefrom, said printing unit including at least one member for printing data and means for receiving printer control signals, comprising:

obtaining data uniquely identifying and authenticating the print member in a first communication mode by the data generating unit,

generating a signature of the franking data by the data generating unit,

encrypting the signature of the franking data by the data generating unit using an encryption key determined using the obtained data uniquely identifying and authenticating the print member,

sending the franking data and the encrypted signature to the printing unit in a second communication mode and sending a control signal using the printing control signals, and

decrypting the encrypted signature by the print member.

32. A franking machine according to claim 19, wherein the decrypting means are fixed to a printed circuit comprising PTF polymer that is fixed to the print member.

33. A franking machine according to claim 27, wherein the decrypting means are fixed to a printed circuit comprising PTF polymer that is fixed to the print member.

34. A franking machine according to claim 19, wherein the decrypting means are fixed to a printed circuit comprising PTF polymer that is approximately 0.125 mm thick and that is fixed to the print member.

35. A franking machine according to claim 27, wherein the decrypting means are fixed to a printed circuit comprising PTF polymer that is approximately 0.125 mm thick and that is fixed to the print member.

36. A franking machine according to claim 19, wherein the decrypting means are fixed to a printed circuit comprising a substrate and at least one circuit having a total thickness less than 1.5 mm.

37. A franking machine according to claim 27, wherein the decrypting means are fixed to a printed circuit comprising a substrate and at least one circuit having a total thickness less than 1.5 mm.

38. A franking machine according to claim 19, wherein the decrypting means are fixed to a printed circuit comprising a substrate and at least one circuit having a total thickness from 1.5 mm through 2 mm.

39. A franking machine according to claim 27, wherein the decrypting means are fixed to a printed circuit comprising a substrate and at least one circuit having a total thickness from 1.5 mm through 2 mm.

40. A franking machine according to claim 19, wherein the decrypting means are fixed to a printed circuit comprising a substrate and at least one circuit having a total thickness from 1.5 mm through 2 mm.

41. A franking machine according to claim 27, wherein the decrypting means are fixed to a printed circuit comprising a substrate and at least one circuit having a total thickness from 1.5 mm through 2 mm.

42. A franking machine according to claim 19, wherein
the first communications mode utilizes a first communications channel; and

the second communications mode uses a second communications channel.

43. A franking machine according to claim 42, wherein
the first communications channel is a wireless communications channel; and
the second communications channel is a wired communications channel.

44. A franking machine according to claim 19, wherein the print member includes at least one tag identifying said print member and wherein the tag is permanently attached to the print member such that attempting to remove the tag will render it inoperative.

Appendix IX – Evidence Appendix

None

Appendix X – Related Proceedings Appendix

None